



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1590
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|-------------|----------------------|---------------------|------------------|
| 10/015,572 | 12/17/2001 | Joey Chow | 18157-US | 6250 |
| 23553 | 7590 | 10/20/2005 | EXAMINER | |
| | | | NGUYEN, CINDY | |
| | | ART UNIT | | PAPER NUMBER |
| | | 2161 | | |
| DATE MAILED: 10/20/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/015,572 | CHOW ET AL. |
| | Examiner | Art Unit |
| | Cindy Nguyen | 2171 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 27 July 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 and 14-18, 21-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-11 and 14-18, 21-22 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 17 December 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) Other: _____

DETAILED ACTION

This is response to amendment filed 07/27/05.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 14-18, 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al. (US 20020016933) (Smith).

Regarding claim 1, Smith discloses: A source selection system in a communication switch having active and redundant data flow paths, said source selection system comprising:

A plurality of datasources (data paths) operating independently and outputting in parallel the same data subject to data transmission errors (working path becomes unavailable) that may be different for each of said datasources (paragraphs 0015, 0016, 0024, Smith);

One of said datasources being selected as an active datasource (working data path), wherein the data output thereby is used as active data for onward transmission over the active data flow path within said switch, and the other of said corresponding

datasources serving as a redundant datasource wherein the data output thereby acts as substitute data for use in the event of inadequate operational performance of said active resource (paragraphs 0015, 0016, 0022, 0024, and 0026, Smith);

 a validation module (encoder/decoder, 0063) associated with said second datasource adapted to monitor said datasource for transmission and provide information relating to said transmission errors (paragraphs 0018, 0063, Smith);

 an assessment module (FEC used to improve the quality of data transmission and monitoring the health/quality of the working and protected paths) receiving said information from said validation module and assessing operational performance of each of said datasources based on said information (paragraphs 022, 0072, 0110, Smith);

 a source selector (working data path) responsive to instructions from said assessment module to select as said active datasource one of said datasources based on the operational performance of said plurality of datasources (paragraphs 0022, 0024, 0026, 0058, 0062, Smith).

Regarding claim 11, all the limitations of this claim have been noted in the rejection of claim 1 above. It is therefore rejected as set forth above.

Regarding claim 2, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Smith discloses: wherein said validation module comprises a plurality of validation sub-modules (Hamming error detection and correction modules), each one of said plurality of validation sub-modules associated respectively with one of said plurality of datasources (paragraphs 0061-0064, Smith).

Regarding claims 3 and 14, all the limitations of these claims have been noted in the rejection of claims 2 and 11 above, respectively. In addition, Smith discloses: wherein said validation module performs an integrity check on data transmitted by said datasource to provide information relating to transmission errors (paragraphs 0013, 0072, 0076, Smith).

Regarding claims 4 and 15, all the limitations of these claims have been noted in the rejection of claims 3 and 14 above. In addition, Smith discloses: wherein said assessment module evaluates severity of said transmission errors provided in said information and causes said source selector to select active output datasource associated with said primary datasource based on said severity of said transmission errors (paragraphs 0062 and 0064, Smith).

Regarding claims 5 and 16, all the limitations of these claims have been noted in the rejection of claims 4 and 15 above. In addition, Smith discloses: wherein said integrity check on said data comprises a parity check and a cyclic redundancy check (paragraphs 0013, Smith).

Regarding claims 6 and 17, all the limitations of these claims have been noted in the rejection of claims 5 and 16 above. In addition, Smith discloses: wherein said integrity check is performed on a payload portion of said data (paragraphs 0058, Smith).

Regarding claims 7 and 18, all the limitations of these claims have been noted in the rejection of claims 6 and 17 above. In addition, Smith discloses: wherein said integrity check is performed on a header portion of said data (paragraphs 0013, Smith).

Regarding claim 8, all the limitations of this claim have been noted in the rejection of claim 7 above. In addition, Smith discloses: further comprising a plurality processing cards and an interface card in said communication switch said plurality of processing cards providing said plurality of datasources, and said source selector operating input to said interface card (paragraphs 0065, 0112, Smith)

Regarding claim 9, all the limitations of this claim have been noted in the rejection of claim 8 above. In addition, Smith discloses: wherein said integrity check is performed upon said data being received by at least one of said processing cards of said communication switch (paragraphs 0065, 0112, Smith).

Regarding claim 10, all the limitations of this claim have been noted in the rejection of claim 9 above. In addition, Smith discloses: wherein said source selector is a multiplexer (paragraphs 0062, Smith).

Regarding claim 21, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Smith discloses: a first communication module comprising a first chain of successive data processing elements outputting data (paragraphs 0015-0018, Smith);

A second communication module comprising a second chain of successive data processing elements outputting data (paragraphs 0015-0018, Smith);

Each of said data processing elements in said first communication module having a corresponding data processing element in said second communication module, whereby successive pairs of data processing elements in said first and second communication modules output the same data in parallel subject to transmission errors which may be different for each data processing element of said successive pairs of data processing elements (paragraphs 0015-0018, Smith);

Cross connects for cross connecting an output of at least some of said data processing elements in each of said first and second chains with an input of a following said data processing element in the other of said first and second chains (paragraphs 0015-0018, Smith);

A source selector responsive to instructions from said assessment module to select as an upstream active data source for a particular said data processing element one of said data processing elements of a processing pair of said data processing elements based on the operational performance of said data processing elements in said preceding pair, the other of said data processing elements of said preceding pair of said data processing elements serving as an upstream redundant source until the operational performance thereof becomes worse than said active upstream data source, whereupon said source selector switches roles of said active and redundant data sources (paragraphs 0015-0018, 0062-0064, Smith).

Regarding claim 22 all the limitations of this claim have been noted in the rejection of claim 9 above. In addition, Smith discloses: wherein said assessment module continually instructs said source selector to select the datasource with the best operational performance (paragraphs 0062-0064, Smith).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Larsson et al. (U.S 6201811). Transferring identifier information in a telecommunications system.

Sederlund et al. (U.S 5568615). Stealth interface for process control computers.

Van Huben et al. (U.S 5950201). Computerized design automation method using a single logical PFVL paradigm.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahić can be reached on 7571-272-4023. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CN
Cindy Nguyen
October 13, 2005

Frantz Coby
FRANTZ COBY
PRIMARY EXAMINER